

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

| | | |
|--|--|---|
| | | Date of mailing (day/month/year) see form PCT/ISA/210 (second sheet) |
| Applicant's or agent's file reference see form PCT/ISA/220 | | FOR FURTHER ACTION See paragraph 2 below |
| International application No. PCT/IB2004/003107 | International filing date (day/month/year) 23.09.2004 | Priority date (day/month/year) 23.09.2003 |
| International Patent Classification (IPC) or both national classification and IPC C09B62/04, C09B62/09, C09D11/02 | | |
| Applicant CLARIANT INTERNATIONAL LTD | | |

1. This opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 a sequence listing
 table(s) related to the sequence listing
 - b. format of material:
 in written format
 in computer readable form
 - c. time of filing/furnishing:
 contained in the international application as filed.
 filed together with the international application in computer readable form.
 furnished subsequently to this Authority for the purposes of search.
3. In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2004/003107

**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or
industrial applicability; citations and explanations supporting such statement**

1. Statement

| | | |
|-------------------------------|-------------|------|
| Novelty (N) | Yes: Claims | 1-12 |
| | No: Claims | |
| Inventive step (IS) | Yes: Claims | |
| | No: Claims | 1-12 |
| Industrial applicability (IA) | Yes: Claims | 1-12 |
| | No: Claims | |

2. Citations and explanations

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

Re Item V.

- 1 The following document is referred to in this communication:
D1 : GB 2 331 757 A (ZENECA LTD) 2 June 1999 (1999-06-02)

2 Novelty

As acknowledged in the present application Document D1 describes dyes comprising bis[(4-[2-amino-3,6-disulpho-8-hydroxynaphth-1-ylazo]anilino)-1,3,5-triazinyl] moieties. Dyes 2-4, 10, 11 disclosed in Table 1 of D1 contain an organic aliphatic linking group (Q).

These specific compounds additionally contain on their triazinyl moieties a substituent (Z^1) which cannot be regarded as a labile group. They are however obtained by a condensation reaction involving a compound of formula Z^1H and an intermediate prepared by reaction of the product of stage (iii) of example 1 with a compound of formula H-Q-H (see D1, page 17, lines 22-29). These "resulting products" correspond broadly to formula (1) of claim 1 (they contain a labile atom) but differ in that their aliphatic linking group Q comprises more than one oxygen atoms.

The subject-matter of the present application is therefore new (Article 33(2) PCT).

3 Inventive step

Document D1 discloses dyes for use in ink-jet printing, whose general formula encompasses the formula of the dyes of the present application. The subject-matter of claim 1 consists therefore in the selection of dyes comprising bis[(4-[2-amino-3,6-disulpho-8-hydroxynaphth-1-ylazo]anilino)-1,3,5-triazinyl] moieties from the range of dyes comprising bis[(4-[2-amino-3,6-disulpho-8-hydroxynaphth-1-ylazo]anilino)-1,3,5-triazinyl] moieties described in document D1. Such a selection can only be regarded as inventive, if the claimed dyes present unexpected effects or properties in relation to the rest of the range. However, no such effects or properties are indicated in the application (see in particular D1, page 11, lines 15-18, where high light-fastness is already specifically mentioned).

Therefore the present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 does not involve an inventive step in the sense

of Article 33(3) PCT.

The same reasoning applies, mutatis mutandis, to the subject-matter of the corresponding independent claims 6, 7 and 10-12 which are all characterized by the presence or use of compounds of formula (1) and which therefore are also considered not inventive.

Dependent claims 2-5, 8 and 9 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step, see document D1 and the corresponding passages cited in the search report.

Re Item VIII.

- 1 Paragraph 1 of description page 15 refers to "...a fifth aspect of the present invention..." although no fourth aspect is previously described. Moreover this embodiment of the invention does not fall within the scope of the claims. This inconsistency between the claims and the description leads to doubt concerning the matter for which protection is sought, thereby rendering the claims unclear (Article 6 PCT).
- 2 A further clarity problem can be seen in paragraph 3 of description page 9 which refers to "corresponding direct dyestuffs" although such dyestuffs do not appear to fall within the scope of the claims.